

What is claimed is:

1. A system for loading a distal protection device, comprising:
  - a delivery sheath having a proximal end, a distal end, and a lumen extending though at least a portion of the distal end;
  - an elongate shaft having a proximal end and a distal end, wherein at least a portion of the shaft is adapted to be disposed within the lumen of the delivery sheath;
  - a filter disposed proximate the distal end of the shaft; and
  - a loading tool for loading the filter into the delivery sheath, the loading tool having a proximal end, a distal end, and a lumen extending therethrough adapted to receive at least a portion of the filter, wherein at least a portion of the loading tool is configured to be coupled to the delivery sheath.
2. The system in accordance with claim 1, wherein the sheath, the shaft, the filter, and the loading tool are disposed within a one or more sterile packages.
3. A kit for loading a distal protection device, comprising:
  - a delivery sheath having a proximal end, a distal end, and a lumen extending though at least a portion of the distal end;
  - an elongate shaft having a proximal end and a distal end, wherein at least a portion of the shaft is adapted to be disposed within the lumen of the delivery sheath;
  - a filter disposed proximate the distal end of the shaft;
  - wherein the sheath, the shaft, and the filter are disposed within one or more packages; and

a loading tool for loading the filter into the delivery sheath, the loading tool having a proximal end, a distal end, and a lumen extending therethrough adapted to receive at least a portion of the filter, wherein at least a portion of the loading tool is configured to be coupled to the delivery sheath.

4. The kit in accordance with claim 3, wherein the loading tool is disposed within the package.

5. The kit in accordance with claim 3, wherein the package is sterile.

6. A method of loading a filter, comprising the steps of:  
providing a sterile package including a delivery sheath, an elongate shaft having a filter disposed proximate a distal end thereof, and a loading tool;  
removing the delivery sheath from the sterile package;  
removing the loading tool from the sterile package;  
coupling the loading tool to a delivery sheath;  
removing the shaft from the sterile package;  
loading the filter within the delivery sheath by applying force to the elongate shaft, wherein the filter passes through a lumen within the loading tool and into a lumen within the delivery sheath; and  
separating the loading tool from the delivery sheath.

7. A system for loading a distal protection device, comprising:  
a delivery sheath having a proximal end, a distal end, and a lumen extending though at least a portion of the distal end;  
an elongate shaft having a proximal end and a distal end, wherein at least a portion of the shaft is adapted to be disposed within the lumen of the delivery sheath;  
a filter disposed proximate the distal end of the shaft; and  
a loading tool for loading the filter into the delivery sheath, the loading tool having a proximal end, a distal end, and a lumen extending therethrough adapted to receive at least a portion of the filter, wherein at least a portion of the loading tool is adapted to be coupled to the delivery sheath.

8. The system for loading a filter in accordance with claim 7, wherein the loading tool further comprises a first inside diameter region proximate the distal end thereof.

9. The system for loading a filter in accordance with claim 8, wherein the loading tool further comprises a second inside diameter region proximate the proximal end thereof.

10. The system for loading a filter in accordance with claim 9, wherein the inside diameter of the loading tool at the first outside diameter region is greater than the inside diameter of the loading tool at the second outside diameter region.

11. The system for loading a filter in accordance with claim 10, wherein the inside diameter of the loading tool at the first outside diameter region is about 0.080 to 0.100 inches.

12. The system for loading a filter in accordance with claim 10, wherein the inside diameter of the loading tool at the second outside diameter region is about 0.043 to 0.080 inches.

13. The system for loading a filter in accordance with claim 9, wherein the loading tool further comprises a notched region and a third inside diameter region.

14. The system for loading a filter in accordance with claim 13, wherein the delivery sheath further comprises an outside diameter and an inside diameter.

15. The system for loading a filter in accordance with claim 14, wherein the inside diameter of the loading tool at the third inside diameter region and the outside diameter of the delivery sheath are substantially equal.

16. The system for loading a filter in accordance with claim 15, wherein the inside diameter of the loading tool at the second inside diameter region and the inside diameter of the delivery sheath are substantially equal.

17. The system for loading a filter in accordance with claim 7, wherein the filter may be in an expanded configuration.

18. The system for loading a filter in accordance with claim 17, wherein the filter is in the expanded condition when it is disposed within the lumen of the loading tool near the distal end thereof.

19. The system for loading a filter in accordance with claim 7, wherein the filter may be in a collapsed configuration.

20. The system for loading a filter in accordance with claim 19, wherein the filter is in the expanded condition when it is disposed within the lumen of the loading tool near the proximal end thereof.

21. A method of loading a filter, comprising the steps of:

- providing a loading tool having a proximal end, a distal end, and a lumen extending therethrough;
- providing an elongate shaft having a filter disposed proximate a distal end thereof, wherein the filter is configured to be disposed with the lumen of the loading tool and in an expanded configuration;
- coupling the loading tool to a delivery sheath having a proximal end, a distal end, and a lumen extending through at least a portion of the distal end;

urging the filter toward the proximal end of the loading tool by applying force to the elongate shaft, wherein the filter shifts from the expanded configuration to a collapsed configuration; and

urging the filter to within the lumen of the delivery sheath.

22. The method in accordance with claim 21, wherein the loading tool further comprises a first inside diameter region proximate the distal end thereof.

23. The method in accordance with claim 22, wherein the loading tool further comprises a second inside diameter region proximate the proximal end thereof.

24. The method in accordance with claim 23, wherein the inside diameter of the loading tool at the first outside diameter region is greater than the inside diameter of the loading tool at the second outside diameter region.

25. The method in accordance with claim 24, wherein the inside diameter of the loading tool at the first outside diameter region is about 0.080 to 0.100 inches.

26. The method in accordance with claim 24, wherein the inside diameter of the loading tool at the second outside diameter region is about 0.043 to 0.080 inches.

27. The method in accordance with claim 23, wherein the loading tool further comprises a notched region and a third inside diameter region.

28. The method in accordance with claim 27, wherein the delivery sheath further comprises an outside diameter and an inside diameter.

29. The method in accordance with claim 28, wherein the inside diameter of the loading tool at the third inside diameter region and the outside diameter of the delivery sheath are substantially equal.

30. The method in accordance with claim 28, wherein the inside diameter of the loading tool at the second inside diameter region and the inside diameter of the delivery sheath are substantially equal.

31. The method in accordance with claim 21, further comprising the step of uncoupling the loading tool from the delivery sheath.

32. The method in accordance with claim 31, wherein the step of uncoupling the loading tool from the delivery sheath results in the filter being appropriately prepared for entry into a blood vessel.